

SWARCer NEWS

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Jim (K9RII) in honor
of Ms. Patty

American Legion Post 116 Report : Mike (KD4OKR)

- Bunker has been used as a storage room
- Post 116 Building Committee has approved a patio extension to be used as storage
- Museum and meeting space at the Legion will be shared
 - A motion was made to contribute \$600.00 to Post 116 (\$300 still committed)
 - Motion was seconded; motion was approved.
- Greg Gabry is eager to move ahead with the Post 116 museum project
- See Mike (KD4OKR) or Tim (W2TAR) if you are interested in support this project

SWARC General Elections Report: Mike (KD4OKR)

- Mike (KD4OKR) is heading the formation of the Election Committee
- He needs help soliciting nominations for club officers
- is SKYWARN



Public Service Through Amateur Radio

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of our members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service.

ATTENDANCE

No attendance was taken.

General Meeting

**South Wake Amateur
Radio Club
Monthly Meeting Notes
Monday, March 6, 2017**

**Vice President Dave
(NW3U) called the
meeting to order at 7:03
p.m.**

Treasurer's

Report: Christy (KJ4AEO)

- Current treasury balance: \$4234.86
- Latest debits include post office box fee



Club News and World (LOCAL) Events

Hi everyone as the new editor of the club newsletter I want everyone to know what to expect. I am hoping to have the newsletter out the first weekend after the club meeting. So if you have information you want included then I will need it that weekend. If you take part in a special event the write it up and submit it along with some pictures.

We will be happy to include your articles. If you would like to write about something going on in the club (good or bad) we will be happy to include your article. Please remember this is your newsletter and your contributions are appreciated.

Send articles to

Ka0gmy@bellsouth.net

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SWARC General Elections

Report: Mike (KD4OKR)

- Mike (KD4OKR) is heading the formation of the Election Committee
- He needs help soliciting nominations for club officers
- Mike (K4MWG) + Tim (W2TAR) + Dave (NW3U) = Elections Committee Members for 2017

General

Announcements: Dave
(NW3U)

- Jim (K9RII) lost his wife on March 4, 2017
- The club will send flowers to the family for the service
 - A motion was made to budget \$120 for a robust flower arrangement
 - Motion was seconded; motion was approved
- SWARC will purchase one table at RARSfest to be held on April 15, 2017

- Mike (KD4OKR) will request that the club table be located next to the 2 tables that Nancy (KM4KUT) has purchased for her school club
- Nancy (KM4KUT) volunteered to sell club raffle tickets for the duration of RARSfest; students can assist
- David Sosnin (N4TTN) is in charge of the club raffle (tickets are \$5 each)
- April's monthly meeting program is SKYWARN
- Mike (KD4OKR) will be doing a demo on SDR radio during the dinner portion of April's monthly meeting

Vice President Dave (NW3U) adjourned the meeting at 7:18 p.m.

Program for the Meeting

- Mr. Fred Benson (NC4FB)
- <http://nc4fb.org>

Please see Fred's website for access to his presentation to the club.

The password for access is SWARC.

Fred's presentation on amateur radio antennas included such captivating topics as:

- Antenna modeling software
- Antenna gain
- Radiation patterns
- FBR
- SWR bandwidth
- Transition Line Characteristic Impedance
- Radiation Resistance
- Antenna Input Impedance
- VSWR
- CMC
- Antenna efficiency
- EM Wave Propagation
- Antenna losses

Special emphasis was placed on the following:

- G5RV antenna (multi-band HF dipole)
- Optimized: ZS6BKW
- AF3V compact antenna for 160m
- Free software from AC6LA

The program concluded at 8:22 p.m.

NEXT MEETING: April 3, 2017 | dinner* at 6:00 p.m. | meeting at 7:00 p.m. *RSVP for potluck at southwakearc.com
Respectfully submitted, Nancy (KM4KUT)

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Respectfully submitted, Nancy (KM4KUT)

Raffle

The decision was made concerning the new raffle.

There will once again be three prizes as this seemed to go over well.

Prizes will be gift certificates in the amounts of \$300.00, \$250.00, and \$100.00 to our favorite ham radio outlet.

David, N4TTN and Jason, KM4PFV have agreed to head this project and I understand that the tickets are available and are ready for purchase. So bring your pocket books and check books to all events so you can get your ticket.

Membership

Ryan, NC4RA has reported that he is receiving new applications weekly. This is great to know that we are a part of a growing club. If you have a question about your membership or want to inquire about becoming a

member please contact Ryan, NC4RA at rwavery@charter.net

Ryan has also stated that he has a back log of several months of applications to be processed.

Ryan has also reported that as of the last meeting there were 123 members.



**Club News
and World
(local) Events**

BOARD OF DIRECTORS

President

Steve Mowels - KA0GMY

Vice President

David Krum – NW3U

Secretary

Nancy Butterfield – KM4KUT

Treasurer

Christy Fernandini - KJ4AEO

Member-At-Large

Ryan Sheppard – K4OKI

Member-At-Large

Tim Ruffin – W4TAR

Member-At-Large

Bradley Norton – KM4JYR

Membership Chair

Ryan Avery , NC4RA

APPOINTED POSITIONS

Net Manager

Julie Royster - KT4JR

Special Events Director

Gino Fernandini - KI4YXO

Public Service Director

Wade Gutreuter –

KW4EMG

NET REPORT

Hi Folks,

I have attached the complete net report for February, thanks to Mark's having sent his reports.

Below is a short version for the newsletter.

Cheers to all!

Julie

February Net Report

The SWARC nightly net continues to be popular, and it is nice to have newly licensed hams checking in to join the community. Here is a summary of net statistics, including all the stations who checked in 15 or more times this past month. Respectfully submitted, Julie Royster KT4JR

Net sessions: 28
Members participating: 39
Visitors participating: 89
Total checkins ("QNI") 606

Net control operators listing:

KJ4CVK	M	6
KT4JR	M	5
KW4EMG	M	4
NC4MP	M	4
AJ4NX	M	4
KM4KUT	M	3
K9RII	M	1
KM4JYR	M	1

Top QNI listing:

26	KT4JR
25	KW4EMG
23	KK4QDZ
23	WA3JJG (Guest)
22	KM4TLE
22	WA4TCJ
20	NC4MP
18	KJ4CVK
18	KK4BVU (Guest)
18	KN4OO (Guest)
17	KM4JLA (Guest)
16	KI4WAI (Guest)
15	KM4QVG

South Wake Amateur
Radio Club Treasurer

Report

February 2017

Club addition and
reduction activity

Additions

Dues 35.00

Dues 30.00

Dues 15.00

Dues 15.00

Dues 15.00

Meals 120.00

Donation 40.00

Donation 17.00

Donation 30.00

Donation 35.00

Donation 5.00

Donation 10.00

Add Back 50.00

TOTAL ADDITIONS
\$417.00

Reductions

American Legion 600.00

KM4P?FV 150.00

K4ITL Danny 1000.00

USPS 112.00

TOTALREDUCTIONS
1862.00

RBC Bank Account
Activity

Balance as of
02/06/2017 5679.86

Additions 417.00

Reductions 1862.00

Balance as of
03/06/2017 \$4234.86

**STANAG 4285 Signal
Showing Up on 40
Meters, Other
Intruders Spotted**

03/30/2017

A STANAG 4285 intruder has been showing up on 7101.8 kHz, according to the International Amateur Radio Union (IARU) Region 1 Monitoring System (IARUMS).

"The signal was strong in South America, but rather weak in Europe," the **latest edition** of the IARUMS newsletter reported. "We had the same problem in

earlier times. Location probably Falkland Islands." Its unusual designation aside, STANAG 4285's motorboat-like signals are pretty common on HF frequencies between about 2 MHz and 23 MHz. It is the data communication "modem" that North Atlantic Treaty Organization (NATO) military agencies use for the purposes of standardization, and it comes in several flavors (sub-modes), with a variety of speeds — from 75 bps to 3600 bps — and interleaving, both short and long. BPSK, QPSK, and 8PSK are used with STANAG 4285 for specific speeds. The waveform consists of an 1800-Hz carrier with PSK modulation. It's not unusual to hear STANAG-4285 signals around the world, not all of them from NATO stations. Most of the traffic is encrypted, but sometimes it is not, and software is available on the Internet to decode it.

IARUMS further reported that a Russian Air Force F1B (frequency-shift keying) intruder (REA4) was showing up on 7.018 MHz during February, but another F1B intruder on 7.193 MHz from Kaliningrad, Russia, was no longer active at the end of February. German telecommunication authorities had filed a formal complaint. No complaint is

possible regarding another Russian F1B signal on 14.308 MHz, however; it is legal under a footnote to the ITU Radio Regulations that allocates 14.250 to 14.350 MHz to the fixed service on a primary basis in Armenia, Azerbaijan, China, Côte d'Ivoire, the Russian Federation, Georgia, Iran, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, and Ukraine. Reported splatter from Radio France International on 7.205 MHz has been cleared up.

An over-the-horizon radar from Asia is reported to be covering parts of 80 meters daily. Its likely location is China. A Chinese broadband OTH radar was observed on 20 meters, while the Russian systems-intelligence "Konteyner RLS" OTH radar, transmitting from in the Nizhny Novgorod region, is frequently spotted on 20 meters. It was reported disturbing parts of 40 and 20 meters, covering a 13-kHz swath of spectrum. Radio Hargaysa in Somalia is still being heard on 7.120 MHz, but the 7.175 MHz Radio Eritrea signal that was being interfered with from Ethiopia apparently is gone. Radio Taiwan and a Chinese jammer are being heard on 14.295 MHz.

New Bands! FCC Issues Amateur Radio Service Rules for 630 Meters and 2,200 Meters

03/31/2017

[CORRECTED to UPDATE information on effective date: 2017-03-31 @ 1315 UTC]

It's been a long time coming, but the Amateur Service will get two new bands in the near future. The FCC on March 28 adopted rules that will allow secondary Amateur Radio access to 472-479 kHz (630 meters) and to 135.7-137.8 kHz (2,200 meters), with minor conditions. The FCC *Report and Order (R&O)* spells out the details. It allocates 472-479 kHz to the Amateur Service on a secondary basis and amends Part 97 to provide for Amateur Service use of that band as well as of the previously allocated 135.7-137.8 kHz band. The *R&O* also amends Part 80 rules to authorize radio buoy operations in the 1900-2000 kHz band under a ship station license. Just when the new Part 97 rules will go into effect is difficult to determine just yet; more on that below.

"It's a big win for the Amateur community and the

ARRL," ARRL CEO Tom Gallagher, NY2RF, said.

"We are excited by the FCC's action to authorize Amateur Radio access for the first time on the MF and LF spectrum. As amateurs begin using these new allocations in the next few weeks, we encourage the entire Amateur Radio community, as secondary users, to be especially attentive to the rules."

It has not been an easy win, however. ARRL has been trying since the 1970s to convince the FCC to allow amateur access to parts of the spectrum below the Standard Broadcast Band.

Through the Utilities Telecoms Council (UTC), electric power utilities have opposed Amateur Radio use of the MF and LF spectrum, raising unsubstantiated fears of interference to unlicensed Part 15 power line carrier (PLC) systems used to manage the power grid. The FCC said the Amateur Radio service rules it has adopted for 630 meters and 2,200 meters allow for co-existence with PLC systems that use the two bands.

Here are the highlights:

- Amateurs operating on 472-479 kHz will be permitted a maximum equivalent isotropically radiated power (EIRP) of 5 W, except in parts of

Alaska within 800 kilometers (approximately 496 miles) of Russia, where the maximum would be 1 W EIRP. [EIRP is the product of the power supplied to the antenna and the antenna gain in a given direction, relative to an isotropic antenna (absolute or isotropic gain). EIRP is equal to ERP multiplied by 1.64.]

- Amateurs operating in the 135.7-137.8 kHz band will be permitted to run up to 1 W EIRP.
- The FCC is requiring a 1-kilometer separation distance between radio amateurs using the two new bands and electric power transmission lines with PLC systems on those bands. Amateur Radio operators will have to notify the UTC of station location prior to commencing operations. The FCC Wireless Telecommunications Bureau will provide details on the notification process later, but ARRL is urging radio amateurs interested in operating on either band to register at the earliest opportunity, to avoid having to protect any "post-notification" PLCs.
- The FCC placed a 60-meter (approximately 197

feet) above-ground-level (AGL) height limit on transmitting antennas used on 630 meters and 2,200 meters.

- The bands would be available to General class and higher licensees, and permissible modes would include CW, RTTY, data, phone, and image. Automatically controlled stations would be permitted to operate in the bands.

In an unrelated action, the FCC allocated 1,900-2,000 kHz to the maritime mobile service (MMS) on a primary basis for non-Federal use in ITU Regions 2 and 3, and limited the use of this allocation to radio buoys on the open sea and the Great Lakes.

“We are persuaded by ARRL’s comments to adopt final rules that are better tailored to the places where the commercial fishing fleet can make reasonable and productive use of radio buoys,” the FCC said.

Amateur Radio was upgraded from secondary to primary in the 1900-2000 kHz segment in 2015. The FCC said it believes Amateur Radio and radio buoys “can continue to share this frequency band as they have done for many years.” It declined to make

additional spectrum available for radio buoy use.

Effective Date

The fact that the new rules contain a new information-collection requirement — notification of operation to the UTC — makes it difficult to guess at an effective date.

The FCC R&O says the Office of Management and Budget (under the Paperwork Reduction Act) must first approve the information-collection requirements (in §97.303[g][2]). Once that happens, the revised Part 97 rules sections will become effective after the FCC publishes a notice in *The Federal Register* “announcing such approval and the relevant effective date.”

SHARE THIS IF YOU ADMIT
THAT YOU'RE WEIRD
AND DON'T CARE.



SNORFLING:

**Laughing so hard you snort,
then laugh because you snorted,
then snort because you laughed.**



My whole family is Crazy,
That sh!t didn't
Just start with me!

